

REMARKS/ARGUMENT

The applicants' attorneys appreciate the Examiner's thorough search and remarks.

Responsive to the objections against Figure 1 set forth in the Office Action, the specification and Figure 1 have been corrected. Approval of the corrections is requested.

Claims 1-3 are in the application. Claim 3 has been withdrawn from consideration. Claims 1-2 are under consideration.

Claims 1-2 have been rejected under 35 U.S.C. §102(b) as anticipated by Hshieh et al., U.S. Patent No. 5,729,037. Regarding claim 1, it has been set forth that Hshieh et al. show all of the limitations of claim 1 including "a depletion implant area proximate to the gate, the depletion implant species being of the second conductivity type to reduce the concentration of the first conductivity type in the channel region." Hshieh et al. propose a MOSgated device which has a lower threshold voltage achieved by having a lower concentration of dopants below the gate in the channel region. To obtain such a structure Hshieh et al. propose a MOSgated device in which a nitride layer 154 that covers the gate surface retards the segregation of the source. See Col. 4, lines 54-59. Structurally, because of the reduction in boron desegregation, the concentration of dopants (of second type) in the channel region below the gate is reduced, which in turn reduces the threshold voltage. Col. 5, lines 15-21. The reduction of dopant concentration in the channel region with the nitride layer is graphically illustrated by Fig. 4B.

Naturally, a reduction in the concentration of dopants (i.e., second conductivity type) in the channel region at the vicinity of the gate means that the concentration of the dopants of opposite conductivity (i.e., first conductivity type) is increased on a relative scale. Thus, it is clear that the structure shown by Hshieh et al. does not include an implant area in which the implant species of the second conductivity type reduce the concentration of the first conductivity type. Indeed, Hshieh et al. suggest quite the reverse type of structure in order to decrease the threshold voltage. It is respectfully submitted that Hshieh et al. do not show or suggest all of the limitations of claim 1 and, therefore, their teaching does not anticipate the same. no

Reconsideration is requested.

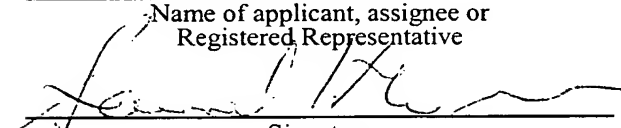
Claim 2 depends from claim 1 and, therefore, includes at least its limitations. Claim 2 includes other limitations, which in combination with those of claim 1 are not shown or suggested by the art of record. Reconsideration is requested.

The application is believed to be in condition for allowance. Such action is earnestly solicited.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Asst. Commissioner for Patents, Washington, D.C. 20231, on September 9, 2002:

Samuel H. Weiner

Name of applicant, assignee or
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Signature

September 9, 2002

Date of Signature

Respectfully submitted,


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APPENDIX A
"CLEAN" VERSION OF EACH PARAGRAPH/SECTION/CLAIM
37 C.F.R. § 1.121(b)(ii) AND (c)(i)

SPECIFICATION:

Replacement for paragraph [0015] at page 3:

*Sub
X
C2* [0015] The implant dose and diffusion drive time will ~~determine the conductivity~~
and depth of the channel regions 24. ~~At the same time that windows are opened in layer 16, a~~
conductive polysilicon field plate 26 (an extension of layer 16) is also defined in the termination
~~region~~

APPENDIX B
VERSION WITH MARKINGS TO SHOW CHANGES MADE
37 C.F.R. § 1.121(b)(iii) AND (c)(ii)

SPECIFICATION:

Paragraph [0015] at page 3:

[0015] The implant dose and diffusion drive time will determine the conductivity and depth of the channel regions [25] 24. At the same time that windows are opened in layer 16, a conductive polysilicon field plate 26 (an extension of layer 16) is also defined in the termination region.